'Applicant : Gregory A. Overkamp et al. Attorney's Docket No.: Intel 10559-Serial No.: 09/675,815 274001 / P9281 - ADI APD1797-1-US

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## Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

## Listing of Claims:

1. (currently amended) A method of handling a plurality of instructions within a processor comprising:

loading the plurality of instructions into a register, said plurality of instructions including two or more instructions at least one instruction—received from—each different ones of a plurality of instruction sources;

determining the number and size of the plurality of instructions; and

decoding the plurality of instructions.

- 2. (original) The method of Claim 1, further comprising decoding the plurality of instructions within a single clock cycle.
- 3. (original) The method of Claim 1, further comprising decoding the plurality of instructions substantially simultaneously.
- 4. (original) The method of Claim 1, further comprising decoding width bits to determine the size of the instructions.

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5. (original) The method of Claim 1, further comprising communicating the number and size of the plurality of instructions to the decoder.

- 6. (original) The method of Claim 1, further comprising loading a first of the plurality of instructions having a first size and a second of the plurality of instructions having a second size.
- 7. (original) The method of Claim 6, further comprising loading a first of the plurality of instructions having a first size, and loading a second and a third of the plurality of instructions having a second size, wherein the first size is 32-bits and the second size is 16-bits.
- 8. (original) The method of Claim 1, handling the plurality of instructions within a digital signal processor.
- 9. (currently amended) A method of decoding a plurality of instructions within a processor comprising:

determining the size of the plurality of instructions;
loading the plurality of instructions into an instruction
register, said plurality of instructions including two or more
instructions at least one instruction received from each
different ones of a plurality of instruction sources;

presenting the plurality of instructions from an the instruction register to a decoder; and

decoding each of the plurality of instructions within a single clock cycle.

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10. (original) The method of Claim 7, further comprising simultaneously presenting each of the plurality of instructions to the decoder.

- 11. (original) The method of Claim 7, further comprising pre-decoding the plurality of instructions to determine the width of the plurality of instructions.
- 12. (original) The method of Claim 7, further comprising loading a next plurality of instructions into the single instruction register.
- 13. (original) The method of Claim 9, further comprising decoding a plurality of instructions in a digital signal processor.
  - 14. (currently amended) A processor comprising:

an instruction register capable of holding a plurality of instructions, said plurality of instructions including two or more instructions at least one instruction received from each different ones of a plurality of instruction sources;

one or more pre-decoders which determines the size and number of the plurality of instructions; and

a decoder which substantially simultaneously receives the plurality of instructions from the instruction register, wherein the decoder decodes each of the plurality of instructions within a single clock cycle.

15. (original) The processor of Claim 14, wherein the predecoder determines width bits.

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## 16. (canceled)

- 17. (original) The processor of Claim 14, wherein the predecoder communicates the number and size of the plurality of instructions to the decoder.
- 18. (original) The processor of Claim 14, wherein the processor is a digital signal processor.
- 19. (currently amended) An apparatus, including instructions residing on a machine-readable storage medium, for use in a machine system to handle a plurality of instructions, the instructions causing the machine to:

determine the size of the plurality of instructions;
load the plurality of instructions into an instruction
register, said plurality of instructions including two or more
instructions at least one instruction received from each
different ones of a plurality of instruction sources;

present the plurality of instructions from an the instruction register into a decoder; and

decode each of the plurality of instructions within a single clock cycle.

- 20. (original) The apparatus of Claim 19, wherein each of the plurality of instructions is simultaneously presented to the decoder.
- 21. (original) The apparatus of Claim 19, wherein the size of the plurality of instructions is determined from width bits.

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22. (original) The apparatus of Claim 19, wherein a next plurality of instructions is loaded into the single instruction register.